



nLIGHT's medium power M200-400™ CW/QCW Fiber Laser outputs a near diffraction limited CW or QCW 1090nm beam. Designed to meet maintenance-free 24/7 industrial operation, the air-cooled system offers a high brightness solution to meet the rigors of the laser micro materials processing industry.

Features

- Air cooled
- Up to 400W peak and 200W average power
- QCW modulation frequency up to 100 kHz
- Analog Waveform Control
- 19" rack mountable Aircooled

Applications

- Micromachining brittle materials (Ceramic & Sapphire)
- Cutting of Stainless steel and mild steel, Aluminium, Gold, Silver, Titanium etc.
- Spot welding of housings, Scanner welding
- Rapid prototyping
- Plastics cutting / welding
- Precision soldering
- Fine wire balling / welding
- Medical device fabrication (fine cutting, welding)
- Marking and Engraving
- Surface treatment
- Laser Additive Manufacturing
- Drilling

Typical Device Performance

Optical		NL-M200-400-QCW-A
Mode of operation		CW/QCW
Polarization		Random
Maximum Average Power (CW mode)	W	200
Maximum peak power (Modulated)	W	400
Maximum Average Power (Modulated)	W	200
Maximum Pulse Energy	J	0.4
Modulation Frequency	kHz	0.5 – 100
Output power range	%	5 – 100
Output power stability (8hrs)	%	< 3
Beam quality (single mode)	M ²	< 1.1
Rise/Fall time	µs	> 5
Wavelength	nm	1090 ± 5
Electrical		
Operating voltage	VAC	200 – 240
Operating voltage frequency	Hz	50 – 60
Control Interface		Analog/RS-232
Mechanical		
Dimensions		5U (19")
Output fiber connection*		nLIGHT Collimator standard
		RQB option
		QCS option
Output fiber cable length*	m	3, 4 (other options available)
Weight	kg	approx. 35
Cooling method		Air
General condition		
Operating temperature**	°C	+10 to +40***
Storage temperature	°C	-10 to +60
Relative Humidity**	%	10 to 80

* May be customized

** A non-condensing environment is required for storage and operation.

*** Specifications met up to 35°C

Laser Safety

This laser product does NOT comply with IEC 60825-1 or 21CFR1040.10/21CFR1040.11 and is solely intended to be integrated into a laser product certified by the Purchaser. The Purchaser acknowledges that their product must comply with the applicable regulations before it can be sold to an end user.

Notice

nLIGHT continually improves its products to provide our customers with outstanding quality and reliability. nLIGHT may make changes to specifications and product descriptions at any time, without notice. In addition, nLIGHT offers a limited warranty to ensure customer satisfaction. For complete details, please contact your nLIGHT sales representative.

Proven Performance

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